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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/575,639	04/13/2006	Fredrik Toorn	9564-13	4627
54414 7590 11/17/2008 MYERS BIGEL SIBLEY & SAJOVEC, P.A. P.O. BOX 37428 RALEIGH, NC 27627				
EXAMINER				
SADIO, INSA				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/575,639

**Applicant(s)**

TOORN, FREDRIK

**Examiner**

INSA SADIO

**Art Unit**

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 April 2006.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-20 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 13 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☒ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO/ISD)  
Paper No(s)/Mail Date 04/13/2006  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1-7, 12, 13, and 15-18, 20** are rejected under 35 U.S.C. 102(b) as being anticipated by Shkolnikov (US Publication number 2003/0122784).

**Regarding claim 1**, Shkolnikov discloses an Active keyboard for handheld electronic gadgets. Shkolnikov also discloses wherein said

A device (see Fig. 1) comprising: display means (see para [0040] (“...housing 30”), Fig 1[30]) for displaying images relating to the operation of the device;

control means (see para [0046] (“All of the functions of the software (to be discussed infra) can be controlled through the combined use of both the keys 32a-32d and the selection device 36”)) for controlling the display means, the control means comprising:

a layered menu structure (see para [0040] (“a display 34”));

a main joystick (see para [0040] (“selection device 36”), para [0044] (“...selection device is a joystick), claim 5) for moving a cursor in menus of the layered menu structure and making selections; and a function key means (see [0050] (“key 32”)); wherein the control means is configured to command display of one minimenu of a

plurality of minimenus (Fig. 5 [92]), each of the minimenus being configured to display at least part of a keypad as soft keys (see Fig 1 [31]) in response to operation of the function key means (see para [0050]), said soft keys being selectable by means of the main joystick, such that said minimenus enable emulation of a whole keypad (see claim 1, (Fig. 1 [31] when the user select dial the screen become a keypad)).

**Regarding claim 2**, Shkolnikov discloses everything as applied above on claim

1. Further Shkolnikov discloses wherein said the function key means is operable in a plurality of states, each state being associated with a different minimenu (para [0050], Fig. 5 [92]).

**Regarding claim 3**, Shkolnikov discloses everything as applied above on claim

2. Further Shkolnikov discloses wherein said a number of states is three, and each minimenu comprises four soft keys ([0041] "four triangular button design" Fig. 5 [92]).

**Regarding claim 4**, Shkolnikov discloses everything as applied above on claim

2. Further Shkolnikov discloses wherein said minimenus in total comprise at least twelve keys (see Fig. 5 [31] twelve elements [31]).

**Regarding claim 5**, Shkolnikov discloses everything as applied above on claim

3. Further Shkolnikov discloses wherein said soft keys are configured to access the numbers 0-9 (see Fig. 5 [31a] When a user hits [31a], this will display some numbers) and \* and # (see Fig. 5 [31c] When a user hits [31c], this will display \* and #), and the letters A-Z (see Fig. 7).

**Regarding claim 6**, Shkolnikov discloses everything as applied above on claim

1. Further Shkolnikov discloses wherein said each soft key has a plurality of functions

associated therewith selectable by means of the main joystick (see claim 9).

**Regarding claim 7**, Shkolnikov discloses everything as applied above on claim 6. Further Shkolnikov discloses wherein said the main joystick is operable a plurality of times in a same direction for selecting different functions of the same soft key (see claim 9).

**Regarding claim 12**, Shkolnikov discloses everything as applied above on claim 1. Further Shkolnikov discloses wherein said the function key means is a multipole key displaceable into a number of states (see para [0055]).

**Regarding claim 13**, Shkolnikov discloses everything as applied above on claim 12. Further Shkolnikov discloses wherein said the multipole key has at least three selectable states (see Fig. 5 [90], [92], [94] each key selects a state in each different column).

**Regarding claim 15**, Shkolnikov discloses everything as applied above on claim 1. Further Shkolnikov discloses wherein said the function key means comprises a separate press button (see para [0040] (32a, 32b, 32c, 32c are separate buttons)).

**Regarding claim 16**, Shkolnikov discloses everything as applied above on claim 15. Further Shkolnikov discloses wherein said the function key means comprises at least two separate press buttons (see para [0040] (four keys 32)).

**Regarding claim 17**, Shkolnikov discloses everything as applied above on claim 16. Further Shkolnikov discloses wherein said the press buttons together have at least three selectable states (see para [0050], Fig. 5 [92] this shows that the combination of the keys has at least three selectable states).

**Regarding claim 18**, Shkolnikov discloses everything as applied above on claim 17. Further Shkolnikov discloses wherein said the press buttons together have three selectable states, a first state by pressing a first button, a second state by pressing a second button (see para [0050]), and a third state by pressing both the first button and the second button simultaneously (see para [0055] "... two keys at the same time").

**Regarding claim 20**, Shkolnikov discloses everything as applied above on claim 1. Further Shkolnikov discloses wherein said the device is a portable telephone, a pager, a communicator, a smart phone, a game device, an electronic organiser, an MP3 player and/or a computer (see para [0040]).

2.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claim 8** is rejected under 35 U.S.C. 103(a) as being unpatentable over Shkolnikov.

**Regarding claim 8**, Shkolnikov discloses the limitation of claim 1 above. Further, Shkolnikov discloses the use of one hand to operate the joystick and the keys.

However, Shkolnikov fails to disclose wherein said the main joystick and the function key means are located on the device such that the joystick is suitable for

operating with a person's one hand, and the function key means is suitable for operating with the person's other hand.

However, it would be obvious to an ordinary skill in the art to use two hands to operate the device on Fig. 1 by the use of one hand to operate the joystick and the other hand to operate the keys if desired.

3.

**Claims 14, 19** are rejected under 35 U.S.C. 103(a) as being unpatentable over Shkolnikov in view of Wu et al. (US Publication number 2003/0048262), hereinafter referenced as Wu.

**Regarding claim 14**, Shkolnikov discloses the limitation of claim 12 above.

Further, Shkolnikov discloses a joystick (see Fig. 1 [36] which has the same functions as a multipole key) at wherein said the multipole key is located on another side at a right angle to the display means.

However, Shkolnikov fails to disclose wherein said the main joystick is located on a same side as the display means.

In a similar field of endeavor Wu discloses a Method and apparatus for navigation, text input and phone dialing.

In addition, Wu discloses wherein said the main joystick is located on the same side as the display means (see Fig. 1 [108] where element [108] is a joystick as described in para [0023] "The embodiment also includes a scrolling device 108", "the scrolling device may also be a joystick").

It would have been obvious to one ordinary skill in the art at the time the invention was made to modify Shkolnikov's joystick with Wu's device because this is an alternative way to locate a joystick in a display.

**Regarding claim 19**, Shkolnikov discloses the limitation of claim 16 above.

Further, Shkolnikov discloses four keys 32 (equivalent to the press buttons) located on opposite sides at right angles to the display means (see Fig. 5 [32])

However, Shkolnikov fails to disclose wherein said main joystick is located on a same side as the display means.

Wu discloses wherein said the main joystick is located on the same side as the display means (see Fig. 1 [108] where element [108] is a joystick as described in para [0023] "The embodiment also includes a scrolling device 108", "the scrolling device may also be a joystick").

**Claims 9, 10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Shkolnikov in view of Maatta et al (US Publication number 2002/0093328), hereinafter referenced as Maatta.

**Regarding claim 9**, Shkolnikov discloses the limitation of claim 1 above.

However, Shkolnikov fails to disclose wherein said the function key means is a second joystick.

Maatta discloses a joystick implemented to replace four arrow keys (see para [0060]).



It would be obvious to one ordinary skill in the art at the time the invention was made to modify Shkolnikov's function key with Maatta's joystick, since this is an alternative way to have an input for the purpose of saving space occupied by the keys.

**Regarding claim 10**, Shkolnikov as modified by Maata discloses a second joystick. It is obvious to one ordinary skill in the art to recognize that for joystick to have at least three selectable states.

**Claim 11** is rejected under 35 U.S.C. 103(a) as being unpatentable over Shkolnikov in view of Maatta and further in view of Wu.

**Regarding claim 11**, Shkolnikov as modified by Maata teaches the second joystick is located on another side at the right angle to the display means(see the rejection of claim 9 above).

Shkolnikov has failed to teach that the main joystick is located on a same side as the display means.

However, Wu cited to teach that it is well known for a joystick to be on the same side of the display (see Fig. 1 [108]).

Therefore, it would have been obvious to ordinary skill in art at the time the invention was made to modify Shkolnikov's joystick with Wu 's device, because this is an alternative way to locate a joystick on a display.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to INSA SADIO whose telephone number is (571)270-5580. The examiner can normally be reached on MONDAY through FRIDAY 8am to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on 571-272-7674. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Supervisory Patent Examiner, Art Unit 2629